GENERAL ELECTRICAL NOTES

GENERAL: UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL WORK SHOWN ON ELECTRICAL DRAWINGS IS NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.

COORDINATION: COORDINATE AND COOPERATE WITH ALL TRADES ON THE PROJECT. THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS INCLUDING CIVIL, STRUCTURAL, ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. CONTRACTOR SHALL COORDINATE AN ADJUST ACCORDINGLY AS DIRECTED BY THE ENGINEER.

AS-BUILT DRAWINGS: SECURE AN EXTRA SET OF ELECTRICAL DRAWINGS TO BE KEPT ON SITE AND MARK, DAILY, THE DRAWINGS IN RED AS THE PROJECT PROGRESSES IN ORDER TO KEEP AN ACCURATE RECORD OF ALL DEVIATIONS BETWEEN THE WORK SHOWN ON THE DRAWINGS AND THE WORK WHICH IS ACTUALLY INSTALLED. THESE MARKED DRAWINGS SHALL REFLECT ANY AND ALL CHANGES AND REVISIONS TO THE ORIGINAL DESIGN WHICH EXISTS IN THE COMPLETED WORK. DELIVER THE MARKED DRAWINGS TO THE ENGINEER AT PROJECT CLOSE-OUT.

TESTS: TEST ALL WIRING FOR CONTINUITY AND GROUNDS BEFORE CONNECTING ANY FIXTURES OR DEVICES. PERFORM INSULATION RESISTANCE TESTS ON ALL WIRING #8 OR LARGER TO INSURE THAT ALL PORTIONS ARE FREE FROM SHORT-CIRCUITS AND GROUNDS.

INSPECTIONS: ARRANGE ALL NECESSARY INSPECTIONS. DELIVER ALL REQUIRED INSPECTION CERTIFICATES TO THE OWNER.

ELECTRICAL SERVICE: MODIFY THE ELECTRICAL SERVICE AS INDICATED. COMMUNICATE WITH THE LOCAL POWER COMPANY, VERIFY ALL REQUIREMENTS, AND COORDINATE ALL EFFORTS.

GROUNDING: PROVIDE GROUNDING IN ACCORDANCE WITH THE NEC FOR THE ENTIRE ELECTRICAL SYSTEM INCLUDING EQUIPMENT FRAMES CONDUITS, SWITCHES, CONTROLLERS, WIRE-WAYS, NEUTRAL CONDUCTORS, AND OTHER EQUIPMENT. PROVIDE A GROUNDING CONDUCTOR IN ALL POWER CONDUITS.

LABELS: PROVIDE LABELS FOR ALL SWITCHBOARDS, SWITCHBOARD BREAKERS, PANELBOARDS, CABINETS, SAFETY SWITCHES, MOTOR-DISCONNECT AND SWITCHES. LABELS SHALL BE MACHINE ENGRAVED, LAMINATED PLASTIC, PERMANENTLY ATTACHED WITH SELF-TAPPING SCREWS OR RIVETS. DO NOT USE SELF-ADHESIVE LABELS.

J-BOX LABELING: LABEL ALL JUNCTION BOXES WITH PERMANENT MARKER IDENTIFYING CIRCUIT NUMBER AND PANELBOARD OF CIRCUITS WITHIN.

PANEL DIRECTORY: PROVIDE TYPEWRITTEN PANELBOARD DIRECTORY CARD IN EACH PANELBOARD WITH CIRCUIT LOAD INFORMATION AND ROOM NUMBER CLEARLY IDENTIFIED. USE ACTUAL ROOM NUMBERS IN THE BUILDING, NOT THE ROOM NUMBERS SHOWN ON THE CONTRACT DRAWINGS, AS THEY ARE OFTEN DIFFERENT.

MOTOR COORDINATION: MOTORS, MOTOR STARTERS, CONTROLLERS, INTEGRAL DISCONNECT SWITCHES, AND CONTACTORS SHALL BE PROVIDED WITH THEIR RESPECTIVE PIECES OF EQUIPMENT BY THE EQUIPMENT SUPPLIER. COMMUNICATE WITH THE TRADES PROVIDING THE EQUIPMENT, VERIFYING ALL REQUIREMENTS, PROVIDE ALL ELECTRICAL CONNECTIONS REQUIRED THEREIN, AND INSTALL MOTOR STARTERS.

MOTOR DISCONNECTS: ALL MOTORS SHALL HAVE DISCONNECTING MEANS.

MOTOR CONTROLLERS: ALL 3-PHASE MOTORS SHALL HAVE MAGNETIC MOTOR CONTROLLERS WITH SOLID STATE OVERLOAD RELAY PROTECTION. THE SOLID STATE OVERLOAD RELAY SHALL HAVE PHASE LOSS AND PHASE OVERCURRENT PROTECTION WITH AUTOMATIC RESET UPON RETURN OF NORMAL POWER.

MOTOR FUSE PROTECTION: WHERE FUSE PROTECTION IS SPECIFICALLY REQUIRED BY THE EQUIPMENT MANUFACTURER, PROVIDE FUSED SWITCHES IN LIEU OF NON-FUSED SWITCHES OR IN LIEU OF ENCLOSED CIRCUIT BREAKERS, OR OTHER DEVICES INDICATED.

CONNECTION DETAILS: SECURE APPROVED SHOP DRAWINGS SHOWING WIRING DIAGRAMS, ROUGH-IN AND HOOK UP DETAILS FROM OTHER INVOLVED CONTRACTORS FOR EQUIPMENT WHICH MUST BE CONNECTED ELECTRICALLY.

COORDINATION DETAILS: MECHANICAL EQUIPMENT WILL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. THE LOCATIONS SHOWN ON THE ELECTRICAL DRAWINGS ARE APPROXIMATE. COORDINATE WITH THE MECHANICAL CONTRACTOR TO DETERMINE THE EXACT LOCATION OF EACH PIECE OF EQUIPMENT AND DETERMINE THE EXACT ROUGH-IN AND CONNECTION REQUIREMENTS.

WORKING CLEARANCE: COORDINATE FINAL LOCATIONS OF ELECTRICAL EQUIPMENT WITH MECHANICAL DUCTWORK, PIPING ETC. AND ASSURE WORKING CLEARANCE REQUIRED BY NEC WILL BE MET. SUFFICIENT ACCESS AND WORKING SPACE SHALL BE PROVIDED AND MAINTAINED AROUND ELECTRICAL EQUIPMENT AS REQUIRED BY THE NATIONAL ELECTRICAL CODE. CONTRACTOR SHALL COORDINATE FINAL LOCATION OF EQUIPMENT PROVIDED AND INSTALLED BY OTHER TRADES.

STARTER MOUNTING: WHERE AN INDIVIDUALLY MOUNTED SAFETY SWITCH, STARTER OR CIRCUIT BREAKER IS SHOWN ADJACENT TO ITS RESPECTIVE LOAD AND NOT MOUNTED ON A WALL, PROVIDE ALL SUPPORTS, BRACKETS, ANCHORING, ETC. NECESSARY TO PROPERLY SUPPORT THE DEVICE.

LIGHTING ARRANGEMENT: ARRANGE LIGHTING FIXTURES IN ACCORDANCE WITH THE ARCHITECTURAL REFLECTED CEILING PLANS.

LIGHTING COORDINATION: COORDINATE LIGHTING FIXTURES WITH GRILLES, DIFFUSERS, SPRINKLER HEADS, AND ACCESS PANELS, ETC. PROVIDE FIXTURE MOUNTING BRACKETS, ACCESSORIES, PLASTER FRAMES, ETC.. SUITABLE FOR THE CEILING TYPES INDICATED ON THE ARCHITECTURAL PLANS.

MATERIAL COORDINATION: VERIFY CEILING AND WALL CONSTRUCTION AND MATERIAL PRIOR TO ORDERING LIGHT FIXTURES OR OTHER DEVICES TO INSURE PROPER FIXTURE OR DEVICE IS FURNISHED TO MATCH CONSTRUCTION.

MOUNTING HEIGHTS: MOUNTING HEIGHTS INDICATED ARE FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE WIRING DEVICE UNLESS OTHERWISE NOTED. MOUNTING HEIGHTS OF LIGHTING FIXTURES ARE TO THE BOTTOM OF THE FIXTURE UNLESS OTHERWISE NOTED.

DEVICE LOCATIONS: COORDINATE LOCATIONS OF SWITCHES, RECEPTACLES, AND TELE/DATA OUTLETS WITH OTHER WALL MOUNTED DEVICES SUCH AS THERMOSTATS AND CONTROL STATIONS.

EWC RECEPTACLES: RECEPTACLES FOR ELECTRIC WATER COOLERS (EWC) SHALL BE INSTALLED OUT OF VIEW AND BEHIND THE EWC ENCLOSURE. VERIFY THE MOUNTING HEIGHT WITH THE EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.

DEVICE COORDINATION: THOROUGHLY REVIEW AND COORDINATE ALL CASEWORK AND CABINET DRAWINGS AND ARCHITECTURAL ELEVATIONS WITH DEVICE LOCATIONS PRIOR TO ROUGH-IN OF OUTLET BOXES.

FLOOR LOCATIONS: VERIFY THE LOCATION OF ALL FLOOR OUTLET BOXES AND OF CONDUIT STUB-UPS WITH THE ARCHITECT'S FURNITURE AND EQUIPMENT LAYOUT PRIOR TO INSTALLATION.

BARRIERS: WHERE A MULTIPLE-GANG BOX HAS CIRCUITS OF DIFFERENT VOLTAGES OR SYSTEMS WHICH ARE REQUIRED TO BE SEPARATED, PROVIDE THE CODE-REQUIRED SEPARATION USING A FULL HEIGHT AND DEPTH BARRIER PLATE.

3

FIRE-RESISTANCE: FOR ANY WALL OR FLOOR PENETRATIONS THROUGH FIRE-RESISTANT STRUCTURES PROVIDE FIRE-RESISTANT SEALANT TO SEAL ALL THE PENETRATIONS AFTER THE CONDUIT HAS BEEN INSTALLED. FIRE-RESISTANCE SEALANT FOR PENETRATIONS SHALL BE UL APPROVED PER THE PENETRATION MADE IN ORDER TO MAINTAIN FIRE-RESISTANT INTEGRITY OF THE STRUCTURE. ALL PENETRATIONS SHALL BE PROTECTED IN COMPLIANCE WITH TESTED THROUGH-PENETRATION ASSEMBLIES, AS REQUIRED BY VUSBC SECTION 712.

CLEAN UP: ON PROJECT CLOSE-OUT CLEAN ALL ELECTRICAL DEVICES, LIGHTING FIXTURES, LAMPS AND LENSES, AND REMOVE ALL PAINT SPATTERS FROM DEVICES, FIXTURES AND PLATES. REPLACE ALL INOPERATIVE LAMPS.

FIRE ALARM COORDINATION: THE FIRE ALARM SYSTEM IS EXISTING. PROVIDE POWER CONNECTIONS TO ALL COMPONENTS WHETHER SHOWN OR NOT. MANUFACTURERS REQUIRE VARYING QUANTITIES OF POWER CONNECTIONS FOR EQUIPMENT LIKE EXPANDER PANELS AND POWER SUPPLIES. THESE DEVICES ARE DEPENDENT UPON THE SPECIFIC MANUFACTURERS SYSTEM. THE FIRE ALARM SYSTEM SUPPLIER SHALL NOTIFY THE OTHER APPROPRIATE SUB-CONTRACTORS ABOUT THESE REQUIREMENTS AND CONNECTION SHALL BE PROVIDED AS PART OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE TO EXTEND/MODIFY CIRCUITRY AS REQUIRED, PROVIDE PERMITS, TESTING, REPROGRAMMING AS NECESSARY TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM.

HVAC DAMPERS, ETC: CONTRACTORS SHALL COORDINATE WITH THE EQUIPMENT AND SYSTEM BEING PROVIDED AND PROVIDE POWER CONNECTIONS ACCORDINGLY. THESE CONNECTIONS SHALL BE FOR FIRE/SMOKE DAMPERS, DDC CONTROL DEVICES, ETC. CONTRACTOR SHALL COORDINATE THE VOLTAGE REQUIREMENTS AND PROVIDE ALL NECESSARY CONNECTIONS, COMPONENTS, ETC. THIS INCLUDES TRANSFORMERS, BOXES, ETC.

ELECTRICAL DEMOLITION NOTES

GENERAL: DEMOLITION DRAWINGS ARE BASED ON EXISTING PLANS AND FIELD INVESTIGATION PRIOR TO DEMOLITION. VISIT THE EXISTING BUILDING PRIOR TO BID IN ORDER TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND IN ORDER TO AVOID CONFLICTS.

DASHED ITEMS: ALL ITEMS SHOWN DASHED ON DEMOLITION PLANS ARE EXISTING AND SHALL BE REMOVED.

SOLID ITEMS: ALL ITEMS SHOWN SOLID ON DEMOLITION PLANS ARE EXISTING TO REMAIN.

CIRCUITING TO REMAIN: EXISTING CIRCUITING TO REMAIN SHALL BE REROUTED OR RECONNECTED, AS REQUIRED, WHERE AFFECTED BY NEW WORK IN ORDER TO MAINTAIN CONTINUITY OF THE CIRCUIT.

REUSE OF EXISTING CIRCUITRY: EXISTING CIRCUITRY SERVING LIGHTING FIXTURES AND/OR RECEPTACLES FOR A GIVEN AREA SHALL BE REUSED TO THE FULLEST EXTENT POSSIBLE TO SERVE THE NEW LAYOUT. PROVIDE CIRCUIT MODIFICATIONS INDICATED OR AS OTHERWISE REQUIRED TO MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT REMAIN.

EXISTING CONDUIT: ALL EXISTING CONDUITS AND WIRING THAT WILL NOT BE REUSED SHALL BE REMOVED WHERE THEY WILL BE EXPOSED UPON COMPLETION OF NEW WORK. EXISTING CONDUIT TO REMAIN CONCEALED IN WALLS SHALL BE ABANDONED. EXISTING CONDUIT TO REMAIN BELOW FLOOR SLAB SHALL BE CUT OFF ONE INCH BELOW ROUGH FLOOR AND GROUTED FLUSH. ALL EXISTING WIRING IN CONDUITS TO BE ABANDONED SHALL BE DISCONNECTED FROM POWER SOURCE AND REMOVED.

REPAIR DAMAGE: EXERCISE CARE IN REMOVAL OF DEMOLITION ITEMS. REPAIR, AT NO ADDITIONAL COST TO THE OWNER, ANY DAMAGE CAUSED TO EXISTING CONSTRUCTION AND/OR EQUIPMENT TO REMAIN.

ASSOCIATED APPURTENANCES: REMOVE ALL ELECTRICAL APPURTENANCES (DISCONNECTS, STARTERS, WIRING, CONDUIT, ETC.) ASSOCIATED WITH EQUIPMENT TO BE REMOVED BY OTHERS.

KNOCKOUT PLUGS AND COVERS: ALL CONDUIT REMOVED SHALL BE REMOVED IN ITS ENTIRETY, INCLUDING FITTINGS, MOUNTING DEVICES , MOUNTING HARDWARE, ETC. PROVIDE CONDUIT PLUGS AND BLANKS FOR ALL OPENINGS CREATED BY THE REMOVAL OF CONDUIT. PROVIDE BLANK COVER PLATES FOR ALL OPENED OUTLET BOXES CREATED BY THE REMOVAL OF EQUIPMENT AND/OR DEVICES

DEMOLISHED MATERIALS: ALL MATERIALS REMOVED UNDER DEMOLITION, NOT TO BE RELOCATED OR DESIGNATED TO BE TURNED OVER TO THE OWNER, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED COMPLETELY FROM THE SITE.

SCHEDULE OUTAGES: ALL WORK AND ALL POWER OUTAGES IN THE EXISTING BUILDING SHALL BE SCHEDULED AT TIMES CONVENIENT TO THE OWNER.

NOTIFICATION: NOTIFY THE OWNER PRIOR TO TURNING OFF ANY CIRCUITS.

ELECTRICAL LEGEND

LIGHTING

FLUORESCENT LIGHTING FIXTURE

HIGH EFFICIENCY FLUORESCENT LIGHTING FIXTURE WITH 100%-50% STEP DIMMING BALLAST, UON.

NL — LIGHTING FIXTURE WITH EMERGENCY EGRESS LIGHTING BATTERY BALLAST - CONNECT EMERGENCY BALLAST AHEAD OF LOCAL SWITCH (UNSWITCHED CIRCUIT). SUBSCRIPT "NL" INDICATES NIGHTLIGHT FIXTURE THAT IS TOTALLY CONNECTED (BATTERY AND NORMAL POWER BALLASTS) TO UNSWITCHED CIRCUIT.

DOWNLIGHT OR PENDANT MOUNTED FIXTURE

DOWNLIGHT FIXTURE WITH DECORATIVE TRIM RING.

STRIP FLUORESCENT LIGHTING FIXTURE, UON

STEM MOUNTED SIGN LIGHTING FIXTURE

LOW VOLT MONORAIL STYLE TRACK LIGHTING SYSTEM. TRACK SHALL BE IN STRAIGHT 6' LENGTHS, UON. ▼INDICATES AN INDIVIDUAL FIXTURE ON THE TRACK.

2 — EXIT LIGHTING FIXTURE, WITH DIRECTIONAL ARROWS AS INDICATED WITH BATTERY PACK - CONNECT AHEAD OF LOCAL SWITCH. SUBSCRIPT "2" INDICATES DUAL-FACE FIXTURE.

COMBO EXIT/EGRESS LIGHTING FIXTURE, WITH DIRECTIONAL ARROWS AS INDICATED WITH BATTERY PACK WITH EMERGENCY BATTERY LIGHTING UNIT - CONNECT AHEAD OF LOCAL SWITCH.

EMERGENCY BATTERY LIGHTING UNIT, CONNECT AHEAD OF LOCAL SWITCH.

A — LIGHTING FIXTURE TYPE SYMBOL. SEE LIGHTING FIXTURE DETAILS.

S — SINGLE POLE SWITCH, 20A, 120/277V, 46" AFF UON

SS — DUAL SWITCH (SINGLE POLE OR TYPE AS INDICATED BY SUBSCRIPT). 20A, 120/277V, 46" AFF UON. CONNECT EACH TO SEPARATELY CONTROL INBOARD AND OUTBOARD LAMPS OF EACH FIXTURE INDICATED. (CONTROL INBOARD AND OUTBOARD LAMPS CONSISTENTLY)

S_3 — THREE-WAY SWITCH, 20A, 120/277V, 46" AFF UON

S_4 — FOUR-WAY SWITCH, 20A, 120/277V, 46" AFF UON

S_D — DIMMER SWITCH, 46" AFF UON. FOR INCANDESCENT FIXTURES, PROVIDE 1500W, 120V SWITCH. FOR FLUORESCENT OR L.E.D. FIXTURES, COORDINATE VOLTAGE AND RATINGS OF SWITCH WITH TYPE AND QUANTITY OF BALLASTS OR DRIVERS TO BE CONTROLLED.

S_K — SINGLE POLE KEYED SWITCH, 20A, 120/277V, 46" AFF UON

S_{K3} — THREE-WAY POLE KEYED SWITCH, 20A, 120/277V, 46" AFF UON

S_{K4} — FOUR-WAY POLE KEYED SWITCH, 20A, 120/277V, 46" AFF UON

S_{OC} — WALL MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR SINGLE LEVEL LIGHT SWITCH, 120/277V, MOUNT 48"AFF. WATT STOPPER #WS-200 OR APPROVED EQUAL.

S_{OC2} — WALL MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR DUAL LEVEL LIGHT SWITCH, 120/277V, MOUNT 48"AFF. WATT STOPPER #WS-200 OR APPROVED EQUAL.

OC — CEILING MOUNTED DUAL TECHNOLOGY ULTRASONIC/PASSIVE INFRARED OCCUPANCY SENSOR, 800W AT 120V, 1200W AT 277V. WATT STOPPER CI-355 OR APPROVED EQUAL.

OC — WALL MOUNTED DUAL TECHNOLOGY ULTRASONIC/PASSIVE INFRARED OCCUPANCY SENSOR, 800W AT 120V, 1200W AT 277V. WATT STOPPER CI-355 OR APPROVED EQUAL.

POWER

SINGLE RECEPTACLE 20A, 120V, 18" AFF, UON

DUPLEX CONVENIENCE RECEPTACLE 20A, 120V, 18" AFF, UON

IG — TWO DUPLEX RECEPTACLES IN COMMON BOX, EACH 20A, 120V, 18" AFF, UON. IG SUBSCRIPT INDICATES TWO DUPLEX ISOLATED GROUND RECEPTACLES.

DUPLEX CONVENIENCE RECEPTACLE 20A, 120V, 46" AFF, UON (OR 6" ABOVE COUNTER AS APPLICABLE)

GFI — GROUND FAULT INTERRUPTING TYPE DUPLEX RECEPTACLE, 20A, 120V,

WP — DUPLEX GFI RECEPTACLE 20A, 120V W/ WEATHERPROOF COVER, 18" ABOVE GRADE, UON

IG — DUPLEX ISOLATED GROUND RECEPTACLE 20A, 120V, 18" AFF, UON

SPECIAL RECEPTACLE, AS NOTED ON PLANS

DUPLEX GFI RECEPTACLE 20A, 120V, WITH WP COVER MOUNTED ON ROOF ON 3/4" CONDUIT STUBBED 6" ABOVE ROOF. COORDINATE ROOF PENETRATION WITH ROOF SYSTEM MANUFACTURER'S RECOMMENDATION.

DEVICE MOUNTED IN FLUSH FLOOR BOX.

CLG — DEVICE MOUNTED IN FLUSH CEILING-MOUNT BOX.

DUAL CHANNEL SURFACE RACEWAY WITH DUPLEX RECEPTACLES AND TELE/COMMUNICATIONS OUTLETS AS INDICATED, UON. SEE "TYPICAL CLASSROOM DEVICE INSTALLATION ELEVATION" DETAIL. MOUNT RACEWAY 18" ABOVE FINISHED FLOOR, UON.

E — EQUIPMENT CONNECTION

J — JUNCTION BOX

MOTOR CONNECTION

S_M — MOTOR RATED SWITCH WITH THERMAL OVERLOADS 20A, 120V, UON, MOUNTED WITHIN SIGHT OF MOTOR.

SAFETY SWITCH. SIZE, FUSE SIZE AND NEMA RATING AS INDICATED ON DRAWINGS

TVSS — TRANSIENT VOLTAGE SURGE SUPRESSOR

ELECTRICAL PANELBOARD

DRY-TYPE TRANSFORMER

T — PAD MOUNTED TRANSFORMER

INDICATES FRONT

TB — HVAC SHUT-OFF TERMINAL BOX, 120V, WITH INTEGRAL CONTROL TRANSFORMER

AND — ELECTRICAL CIRCUIT RUN IN CONDUIT AND CIRCUIT HOMERUN TO PANELBOARD (PANEL AND CIRCUIT DESIGNATION AS INDICATED). AS A MINIMUM CONDITION, EACH SINGLE PHASE CIRCUIT SHALL HAVE 1 #12 PHASE CONDUCTOR, 1 #12 NEUTRAL CONDUCTOR AND 1 #12 GROUNDING CONDUCTOR IN 1/2" CONDUIT. PROVIDE ADDITIONAL PHASE CONDUCTORS AS REQUIRED FOR "MULTIPLE PHASED" ELECTRICAL LOADS. PROVIDE ADDITIONAL "SWITCH LEG" CONDUCTORS TO PROVIDE THE LIGHT FIXTURE CONTROL INDICATED. MULTIPLE SINGLE PHASE CONDUCTORS SHALL BE GROUPED TOGETHER IN A COMMON CONDUIT IN ACCORDANCE WITH THE NEC AND AT THE CONTRACTOR'S DISCRETION. NEUTRAL AND GROUNDING CONDUCTORS SHALL BE SHARED AS ALLOWED BY THE NEC. CONDUIT LARGER THAN 1/2" AND CONDUCTORS LARGER THAN #12 SHALL BE AS INDICATED.

N — EMERGENCY CALL LIGHT

N — EMERGENCY CALL PULL CHAIN

M — MOTION SENSOR

OVERHEAD PROJECTOR

K — KEYPAD, HONEYWELL

ANT — EMERGENCY BLUE PHONE REPEATER ANTENNA LOCATED ON ROOF

MSA — INTERCOM SPEAKER

HC — HANDICAPPED PUSH BUTTON

TB — HVAC TERMINAL BOX

ACCESS CONTROL

AC — ACCESS CONTROL PANEL

PS — POWER SUPPLY - SEE ARCHITECTURAL DOOR HARDWARE SCHEDULE

CR — CARD READER

EH — ELECTRIC STRIKE - SEE ARCHITECTURAL DOOR HARDWARE SCHEDULE

DC — DOOR CONTACT - SEE ARCHITECTURAL DOOR HARDWARE SCHEDULE

RTE — REQUEST TO EXIT - SEE ARCHITECTURAL DOOR HARDWARE SCHEDULE

TELECOMMUNICATIONS

TELE/DATA OUTLET, 18" AFF, UON, WITH 1"C STUBBED TO ACCESSIBLE HALLWAY CEILING WITH PULLSTRING AND BUSHED ENDS.

TELEPHONE SYSTEM OUTLET, 54" AFF, UON, WITH 1"C STUBBED TO ACCESSIBLE HALLWAY CEILING WITH PULLSTRING AND BUSHED ENDS.

TELEPHONE SYSTEM OUTLET, 18" AFF, UON, WITH 1"C STUBBED TO ACCESSIBLE HALLWAY CEILING WITH PULLSTRING AND BUSHED ENDS.

R — EMERGENCY RED PHONE

B — EMERGENCY BLUE PHONE

CL — WALL MOUNTED ANALOG CLOCK MOUNT AT 80"AFF, UON.

TELECOMMUNICATIONS BACKBOARD - 4'W x 8'H x 3/4"THICK

TV — TV OUTLET, 18" AFF, UON, WITH 1" CONDUIT STUBBED TO ACCESSIBLE HALLWAY CEILING WITH PULLSTRING AND BUSHED ENDS.

FIRE ALARM

FIRE ALARM CONTROL PANEL - EXISTING SIMPLEX 4100U

FAA — FIRE ALARM REMOTE ANNUNCIATOR PANEL - EXISTING

DACT — DIGITAL ALARM COMMUNICATION TRANSMITTER

SS — SURGE SUPPRESSOR

F — FIRE ALARM MANUAL PULL STATION, 46" AFF TO ACTUATING ARM, UON

F 15 — FIRE ALARM AUDIO/VISUAL (HORN/STROBE) APPLIANCE, MOUNT SUCH THAT ENTIRE LENS IS NOT LESS THAN 80"AFF AND NOT GREATER THAN 96"AFF. ALL DEVICES SHALL BE MOUNTED AT A CONSISTENT HEIGHT THROUGHOUT BUILDING AT A PREFERRED 80"AFF. SUBSCRIPT INDICATES MINIMUM CANDELA RATING OF STROBE.

F 15 — FIRE ALARM VISUAL (STROBE) APPLIANCE, MOUNT SUCH THAT ENTIRE LENS IS NOT LESS THAN 80"AFF AND NOT GREATER THAN 96"AFF. ALL DEVICES SHALL BE MOUNTED AT A CONSISTENT HEIGHT THROUGHOUT BUILDING AT A PREFERRED 80"AFF, WHICHEVER IS LOWER, UON. SUBSCRIPT INDICATES MINIMUM CANDELA RATING OF STROBE.

F 15 — FIRE ALARM AUDIO/VISUAL (HORN/STROBE) APPLIANCE, CEILING MOUNTED, SUBSCRIPT INDICATES MINIMUM CANDELA RATING.

R — FIRE ALARM SYSTEM DUCT SMOKE DETECTOR REMOTE TEST STATION

S — FIRE ALARM SYSTEM CEILING MOUNTED SMOKE DETECTOR

H — FIRE ALARM SYSTEM CEILING MOUNTED HEAT DETECTOR

PIV — POST INDICATOR VALVE

MM — INDIVIDUAL ADDRESSABLE MONITOR MODULE

V — SPRINKLER TAMPER SWITCH

F — SPRINKLER WATER FLOW SWITCH

D — DUCT MOUNTED SMOKE DETECTOR

R — FIRE ALARM SYSTEM ADDRESSABLE RELAY MODULE

LL — LOW WATER LEVEL SENSOR SWITCH MOUNTED ON ABOVE GROUND WATER STORAGE TANK

NL — NORMAL WATER LEVEL SENSOR SWITCH MOUNTED ON ABOVE GROUND WATER STORAGE TANK.

CABLE TRAY

4" CONDUIT SLEEVES THRU WALL ABOVE CEILING. EXTEND 4" ON EACH SIDE OF WALL & PROVIDE PLASTIC BUSHINGS.

CABLE TRAY, LADDER TYPE 24"W, UON.

J J — J-HOOK, 4"C. SPACING BETWEEN J-HOOKS SHALL NOT EXCEED 5'-0".

GENERAL

DETAIL OR SECTION NOTATION

ENUMERATION: A = DETAIL, 1 = SECTION

SHEET WHERE SECTION IS SHOWN

SHEET WHERE SECTION IS CUT

1 — NEW WORK NOTE SYMBOL

1 — DEMOLITION NOTE SYMBOL

NEW TO EXISTING POINT OF CONNECTION SYMBOL

GENERAL (CONTINUED)

LIMIT OF REMOVAL SYMBOL

SMOKE PARTITION

1 HOUR FIRE RATED WALL

ABBREVIATIONS

A	AMPERE
ACCU	AIR COOLED CONDENSING UNIT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AVAILABLE INTERRUPTING CURRENT
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIO VISUAL
BFG	BELOW FINISHED GRADE
C	CONDUIT
CCTV	CLOSED CIRCUIT TELEVISION
CFL	COMPACT FLUORESCENT LAMP
CKT	CIRCUIT
CB	CIRCUIT BREAKER
CLG	CEILING
CMH	CERAMIC METAL HALIDE
DDC	DIRECT DIGITAL CONTROL
DSS	DUCTLESS SPLIT SYSTEM
DVP	DOMINION VIRGINIA POWER
EBU	EMERGENCY BATTERY UNIT
EC	EMPTY CONDUIT
ECB	ENCLOSED CIRCUIT BREAKER
EF	EXHAUST FAN
ERU	ENERGY RECOVERY UNIT
EQUIP	EQUIPMENT
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXIST	EXISTING
FACP	FIRE ALARM CONTROL PANEL
FHP	FRACTIONAL AC HORSEPOWER
FLA	FULL LOAD AMPS
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HP	HORSE POWER/HEAT PUMP
IG	ISOLATED GROUND
KVA	KILO-VOLT-AMPERES
KW	KILO-WATTS
LTG	LIGHTING
MAU	MAKE-UP AIR UNIT
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MFR	MANUFACTURER
MLO	MAIN LUGS ONLY
MTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NF	NON-FUSED
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
P	POLE
PCP	PUMP CONTROL PANEL
PF	POWER FACTOR
PL	PROPERTY LINE
PNL	PANEL
PNLBD	PANELBOARD
ø	PHASE
PRI	PRIMARY
RECEPT	RECEPTACLE
REQ'D	REQUIRED
RTU	ROOF TOP UNIT
SE	SERVICE ENTRANCE
SEC	SECONDARY
TBB	TELEPHONE BACKBOARD
TRT	TRIPLE TUBE FLUORESCENT LAMP
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
V	VOLT(S)
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS/WIRE
WG	WIREGUARD
WP	WEATHERPROOF

Pace COLLABORATIVE
MECHANICAL ELECTRICAL ENGINEERS
VIRGINIA BEACH, VA - 757-499-7223

nbj ARCHITECTURE
A Professional Limited Company
GROVE PARK SQUARE
11537-B NUCKOLS ROAD
Richmond, Virginia 23059
(804) 273-9811 fax: (804) 273-9843

RAPPAHANNOCK COMMUNITY COLLEGE
CAMPUS RENOVATIONS
WARSAW + GLENNS, VIRGINIA
PC: 260-17712

RAPPAHANNOCK COMMUNITY COLLEGE ELECTRICAL LEGEND, ABBREVIATIONS AND NOTES

Date: APRIL 21, 2010

REVISIONS	
NO.	DATE
1	FEBRUARY 9, 2010
2	MARCH 3, 2010
3	APRIL 21, 2010

COMMONWEALTH OF VIRGINIA
JAMES S. BEDOIS
Lic. No. 032929
4-21-10
PROFESSIONAL ENGINEER

Sheet E-01

File Number